



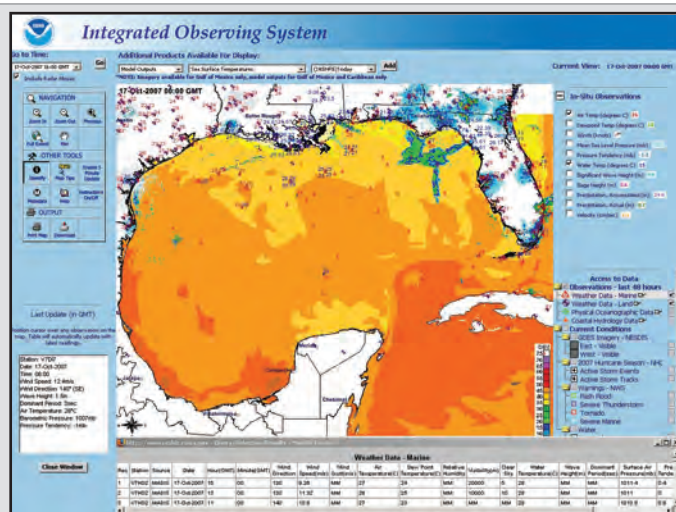
# Integrated Observing System

National Coastal Data Development Center  
www.ncddc.noaa.gov



There is a variety of observing systems that routinely monitor the coastal environment. These include federally operated or managed observing systems that are national in scope. Examples are the array of moored buoys and fixed coastal stations managed by the National Data Buoy Center, the National Water Level Observing Network operated by the National Ocean Service, the U.S. Geological Survey network of stream gages, and land surface weather observations. In addition, there are systems that focus only on a particular coastal region, port, or estuary, and may be operated by universities, the private sector, or federal, state or local agencies.

The Integrated Ocean Observing System (IOOS) will integrate existing systems with an increased number of regionally managed in situ and remote observing systems to improve public safety, monitor the health of our ecosystems, and enhance our understanding of long term climate trends. The IOOS will be developed jointly among federal agencies (coordinated via the Ocean.US Office) and a National Federation of Regional Associations. These Regional Associations will manage the regional coastal observing systems based on regional priorities.



NCDDC's Integrated Observing System, Internet Mapping Service provides a common, geospatially referenced view of real-time and recent coastal and ocean observations. The site includes marine and land surface meteorological observations, oceanographic observations and models, and stream gage observations. These observations can be combined with MODIS satellite Aqua and Terra sensor products developed at the Naval Research Lab/Stennis Detachment. Data are transported into the system via various protocols and on varying schedules. Data users have options to download observations as shapefiles.

Source	Data Type	Frequency	Transport Method	User Download
NOAA ESRL GSD	land/marine observations	hourly	NCDDC gateway	yes
NOAA SSD	GOES Imagery	half-hourly	HTTP/FTP services	no
NOAA NWS	radar mosaics	every 5 minutes	HTTP/FTP services	no
NOAA NWS	weather alerts	every 5 minutes	HTTP/FTP services	yes
NOAA NWS	observed precipitation	daily	HTTP/FTP services	yes
NRL	ocean models	daily	Geoprocessing	no
NRL	MODIS imagery	daily	HTTP/FTP services	no
USGS	river gages	hourly	HTTP/FTP services	yes
NOAAPort	river gages	continuous stream	NCDDC gateway	no
GoMOOS	surface currents	hourly	NCDDC gateway	yes

## Support of IOOS Data Management and Communication (DMAC) Subsystem:

- Data Description (FGDC metadata development)
- Data Discovery (NCDDC metadata catalog queries and map displays)
- Data Transport and Transformation (NCDDC gateway, web service, and geoprocessing technologies)
- Data Distribution (Interoperable access from client applications via NCDDC gateways)
- Data Visualization (ArcIMS Map Service)
- Data archival and retrieval (facilitate archival at National Centers)

## For more information:

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- Please visit our web site: <http://www.ncddc.noaa.gov/COOS>